

A preliminary study on the distribution of spiny lobster (*Panulirus* spp.) in Labuan Island, Malaysia

ABSTRACT

There is a paucity of information on the global distribution and capture fisheries of the spiny lobster *Panulirus*, spp. Under the IUCN Red List produced by the International Union for Conservation of Nature that acts as a critical indicator of the health of the world's biodiversity, most of the *Panulirus* spp. are categorized under least concern category while some show a declining trend. Further investigations are needed due to data deficiency. The present survey was carried out in the western region of Labuan island. Seven random stations along the west coast of the Island were selected for observations during day dive. Generally, the density of the spiny lobsters was low throughout the present study. Only four individuals of two spiny lobster species were recorded. Two individuals of *P. versicolor* were observed in station 2 while the other two (*P. ornatus*) were spotted in station 4. This low number could be due to the preliminary nature and limited duration of the study. Spiny lobsters tend to have a wide range of depth preferences. Two adult specimens of *P. versicolor* were spotted in an environment where turbidity was low. Further investigations over extended period of time and covering larger sampling areas will be necessary to accurately establish the habitat preferences and other ecological aspects of *P. ornatus* and *P. versicolor*.